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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/727,117

11/30/2000

Robert G. Arther

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BAYER HEALTHCARE LLC

P.O.BOX 390

SHAWNEE MISSION, KS 66201

EXAMINER

QAZI, SABIHA NAIM

ART UNIT

PAPER NUMBER

1612

MAIL DATE

DELIVERY MODE

04/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/727,117	ARTHER, ROBERT G.	
	Examiner	Art Unit	
	Sabiha Qazi	1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/31/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

Non-Final Office Action

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/31/08 has been entered.

Claims 21 and 24 are pending. No claim is allowed at this time. Amendments are entered.

35 U.S.C. 112, first paragraph—Written Description Rejection

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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3. Claim 21 and 24 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. New claim 24 contains a limitation of “at least 40% by weight of permethrin and from 8 to 10% by weight of imidacloprid” is considered new matter. Applicant is kindly requested to explain.

The description requirement of the patent statute requires a description of an invention, not an indication of a result that one might achieve if one made that invention. See, e.g., In re Wilder, 22 USPQ 369, 372-3 (Fed. Cir. 1984). (Holding that a claim was not adequately described because the specification did ‘little more than outline goals appellants hope the claimed invention achieves and the problems the invention will hopefully ameliorate.’)

The written description requirement prevents applications from using the amendment process to update the disclosure in their disclosures (claims or specification) during the pendency before the patent office. Otherwise applicants could add new matter to their disclosures and date them back to their original filing date, thus defeating an accurate accounting of the priority of the invention. See 35 USC 132. The function of description requirement is to ensure that the inventor had possession, as of filing date of the application relied on, the specific subject matter claimed by him.

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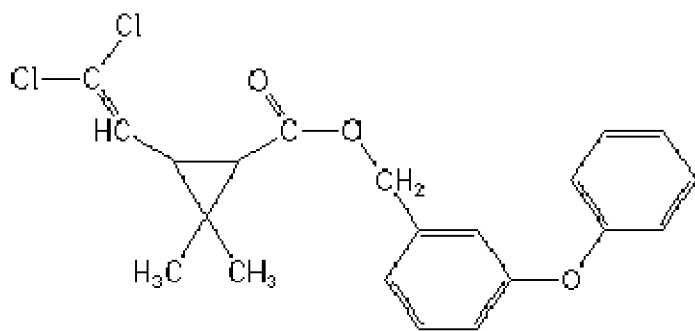
See *Genetech*, 108 F 3d 1361, 1365 (Fed. Cir. at 1366, 78, 1999).

The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to one skilled in the art that the inventor had the possession at the time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claimed language. See *In re Kaslow*, 707 F 2d 1366, 1375 (Fed. Cir. 1983).

Restriction

Applicant elected without traverse the claims directed to the combination specific pyrethroid and chloronicotinyl: permethrin and imidacloprid, respectively.

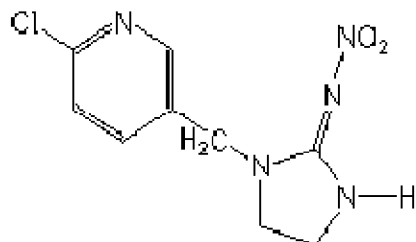
Permethrin



and

Imidacloprid

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**Claim Rejections - 35 USC § 103---1st Rejection**

Claims 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorn et al.

(US Patent 6,232,328).

Dorn et al. teach the combination of pyrethroid and nicotinylic compound specifically imidacloprid and permethrin for the control of parasitic insects such as fleas, lice and flies, which embrace presently, claimed invention. See the entire document especially lines 8-10 and lines 35-68 in col. 17; lines 21 and 22 in col. 18; lines 5-10, lines 25-30 in col. 1; lines 5-10 in column 17 and lines 21 and 22 in column 18. Imidacloprid is disclosed in lines 20-25 column 4 and permethrin which is 3-phenoxybenzyl(+.-)-cis, trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate, is particularly disclosed in lines 21 and 22 in column 18. The reference further teaches that active compounds can be present in the form of a mixture with synergists or other active compounds. The active compounds include natural or synthetic pyrethroids.

Instant claims differ from the reference in that they are of different generic scope. It had been decided by Courts that the indiscriminate selection of “some” from among “many” is considered prima facie obvious. In re Lemin, 141 USPQ 814 (1964); National Distillers and

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Chem. Corp. V. Brenner, 156 USPQ 163. Claim 22 differs from the reference in claiming specific ranges.

The instant claimed compounds would have been obvious because one skilled in the art would have been motivated to prepare compounds embraced by the genus of the above cited references with the expectation of obtaining additional beneficial compounds. The instant claimed compounds would have been suggested to one skilled in the art.

One having ordinary skill in the art would have been motivated to select the claimed compounds from the genus in the reference since such compounds would have been suggested by the reference as a whole. It has been held that a prior art disclosed genus of useful compounds is sufficient to render prima facie obvious a species falling within the genus. In re Susi, 440 F.2d 442, 445, 169 USPQ 423, 425 (CCPA 1971), followed by the Federal Circuit in Merck & Co. V. Biocraft Laboratories, 874 F.2d 804, 10 USPQ 2d 1843, 1846 (Fed. Cir. 1989).

It would have been obvious to one skilled in the art at the time of invention to prepare additional beneficial composition for controlling insects because prior art teaches control of insects by the same combination of compounds as taught by the prior art. Since the synergistic combination is taught by the prior art therefore there is a motivation to prepare the formulation for controlling insects.

Dorn et al. teaches the combination of pyrethroid and nicotinylic compound for the control of parasitic insects such as fleas, lice and flies. Furthermore, it also teaches that the active

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compounds can be present in the form of a mixture may be synergists or other active compounds such as pyrethroids etc., see lines 5-10 in col. 17.

The ratio and combination would have been a routine experimentation because it was known that synergism exist between these compounds as taught by the prior art.

The present specification discloses the combination of a pyrethroid and a chloronicotinyl insecticide which provides enhanced activity against ticks and mites, while maintaining the activity of chloronicotinyl compounds against flees”, (lines 20-23 on page 3). Synergistic effect of the combination with chloronicotinyl (imidacloprid) and pyrethroid (permethrin) is disclosed. Since prior art teaches synergistic effect of such combinations, one skilled in the art would expect synergism with any combination such as imidacloprid and permethrin, which are active compounds and has been presently claimed.

It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 205 USPQ 1069.

In the light of the forgoing discussion, the Examiner’s ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103---2nd Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sirinyan et al (US Patents 6,001,858).

Sirinyan et al. US '858 teaches the combination of imidacloprid and permethrin for the dermal control of parasitic insects. See the abstract, and lines 35-40 in column 4 for imidacloprid and lines 1-2 in column 9 where these compounds are disclosed. See also lines 25-34 in column 8.

Instant claims differ from the reference in having different generic scope.

Prior art teaches the combination of imidacloprid and permethrin that the active compounds can be present in the form of a mixture may be synergists with other active compounds such as pyrethroids etc., see lines 5-10 in col. 17. Permethrin is particularly disclosed in lines 21 and 22 in column 18.

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Since prior art teaches that imidacloprid is synergistic with various pyrethroids and Dorn et al teaches combination of permethrin and imidacloprid may be synergistic one skilled in the art would expect that combination of imidacloprid and permethrin would be synergistic seeing the teaching of prior art.

It would have been obvious to one skilled in the art at the time of invention to prepare additional beneficial composition for controlling insects because prior art teaches control of insects by the same combination of compounds as taught by the prior art. Since the synergistic combination is taught by the prior art therefore there is a motivation to prepare the formulation for controlling insects. The combination would have been a routine experimentation because it was known that synergism exist between these compounds as taught by the prior art.

The data of the combination with chloronicotinylic (imidacloprid) and pyreththroid (permethrin) is disclosed on pages 16-19, Tables 1-4. The data presented is not synergistic. Even if it had been synergistic since prior art teaches synergistic effect of such combinations, one skilled in the art would expect synergism with the combination such as imidacloprid and permethrin because they are most effective agents.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103---3rd Rejection

Claims 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over ELBERT et al. (Brighton crop protection Conference, 1990, pages 21-28) and Shiokawa et al. (US Patent 4,742,060). These references teach the use of imidacloprid alone or in combination with other fungicide for the *treatment of soil for pests*, which embraces Applicants claimed invention.

ELBERT reference

The reference teaches imidacloprid for seed treatment and Cofidor for foliar and *soil* application. See the entire document especially abstract (last lat 5 lines),

The reference teaches that biological efficacy of imidacloprid was tested after foliar application. Systemic properties and residual effect against early season pests were determined after homogenous incorporation of the imidacloprid into *soil*, seed treatment or seedling box application. See last paragraph on page 22.

The reference also teaches that the outstanding systemic properties of *imidacloprid* make it excellent for soil and seed treatment against sucking insects, see Table 2, also see top two lines above table 2 on page 23.

Furthermore, it also teaches the control of cotton pests see Fig 4 on page 26. It also teaches that imidacloprid provides good control of the following important pests in maize,

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Heteronychus arator, *Phyllophage* spp. *Protostrophus* spp., *Astylus atromaculatus*, *Buohonella murine*, O. frit, various species of termites, aphids, jessids, and thrips as foliar pests. See Fig 5 on page 27.

The reference further teaches that imidacloprid is particularly suitable for the treatment pelleted sugar beet seed to protect against infestation with early season pests. It controls the soil pests pigmy mangold beetle *Atomaria Linearis*, wireworms, *Agriotes* sp., and many others. Because of its systemic properties imidacloprid also controls foliar pests in sugar beet such as virus vector aphids and beet fly. (last paragraph on page 27

See also page 28.

SHIOKAWA et al. (US Patent 4,742,060)

Shiokawa reference teaches the imidacalprid (compound 11 (example 11ii) in column 58), which is an old insecticide, applied to same locus (wood) of claims. See lines 45-49 in col. 51; lines 35 and 36 in col. 52; lines 61-67 in col. 53; lines 1-22 in col. 54. See column 12, lines 50-51 and 54, lines 18-20; the same compound is disclosed, see column 58, lines 30-35. See also the entire document, examples and claims.

The reference teaches that the compounds of the invention can be used as insecticides and can be used for control and eradication of wide range of pests. See lines 1-4 in col. 51;

Shiokawa teach the ranges as presently claimed, see lines 10-15 in column 54, where active compounds concentration for use can be 0.0000001 to 100% by weight of the active compound. The reference also teaches that same insects for treatments (disclosed on pages 6 and 7 of present specification) may be combated; see lines 60-67, col. 53. It also teaches that

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that the other active compounds such as fungicides may be combined with imidazolidine insecticides.

Instant claims differ from the reference in claiming a broader scope of fungicides.

It would have been obvious to one skilled in the art to be motivated to prepare additional beneficial use of imidacloprid because the references teach that imidacloprid controls resistant insect, has a broad spectrum of activity especially against sucking pests. Shikowas teaches the combination of fungicides. Therefore, the claimed invention, as a whole would have been *prima facie* obvious to one skill in the art at the time of the invention was made, because every element of the invention and the claimed invention as a whole is fairly suggested by the combined teachings of the references.

Accordingly, the burden of proof is upon applicants to show that instantly claimed subject matter is different and unobvious over those taught by prior art. See *In re Brown*, 173 USPQ 685, 688; *In re Best*, 195 USPQ 430 and *In re Marosi*, 218 USPQ 289, 293.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Response to Remarks

Applicant's arguments were considered but are not found persuasive. Since both the compounds are known for same use it is *prima facie* obvious to combine two compositions each of which is

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taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 205 USPQ 1069.

Further no unexpected results are disclosed.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day except Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Krass Frederick can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sabiha Qazi/

Primary Examiner, Art Unit 1612

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